Farm and Garden

ROMANCE OF THE FARM.

Three Institutions Have Made the Tiller Wealthy, Wise and Comfortable.

The story of agricultural education in America, like that of all science, can be traced page after page in the great book of evolution, and the amazing developmentof the industry in the United States has been due to three factors—first, the state agricultural colleges; second, the national department of agriculture; third, the farmers' institutes.

The American agricultural colleges had their beginning in a revolt against the so called classical education, but it was never intended, as their eminent founder pointed out, that they should be dissociated from a broad and liberal university training. Mr. Justin S. Morrill, the author of the "Magna Charta of Higher Agricultural Education," more than once stated the real purpose of his bill. "It is perhaps needless to say that these colleges were not established or endowed for the sole purpose of teaching agriculture. It was a liberal education that was proposed. Classical studies were not to be excluded and therefore must be included."

The number of agricultural colleges now established is sixty-five; the present value of their permanent funds and equipment is $100,000,000. A recent census showed 73,813 students, with 6,997 teachers.

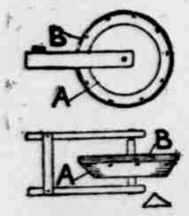
The rise of the United States department of agriculture is a romance of the last century. As far back as the year 1822 a strong effort was made to transform the mall—some 200 acres of land which surrounded the capitol buildings—then practically a barren waste, into an experiment farm in which to propagate new and rare plants. But it was not until forty years later that the United States department of agriculture was erected on the selfsame spot which had previously been sought as an experiment farm.

The alpha and omega of this great organization is the practical application of modern science to the service of the farmer. It can perhaps best be summed up in a homely remark of Secretary of Agriculture Wilson, who in assigning new duties to an expert said: "Don't tell me now about your laboratories. Tell me what you are doing for the man at the plow, out in the fields, with his coat off."

Then come the farmers' institutes. These wonderful societies are scattered all over America and boast a members' roll of more than a million mature men and women. These institutes may be defined as "societies established for the promotion of agriculture among the farming population," and they came into being in order to make the college teaching more practical and more in sympathy with the needs of the farming community. They have proved a great success and have done much to speed forward the agricultural industry. Lectures are given by agricultural experts and practical farmers, and the meetings last only a day or two at most. In this work the farmers' wives and daughters take a prominent part, and women's institutes are now established all over the United States and Canada for the study of household science.

A Seeder For a Few Cents.

One can make a cheap seeder to drop seed behind the plow in the following manner: Take a tin pan that holds at least a quart. Cut a board round and a little larger than the pan and screw pan A to the round wood wheel B. Near the rim of pan punch in some holes as far apart as you want the seed. Have a stoppered hole in the board wheel through which to put in seed. In center of wheel and pan make a hole to put through a bolt for the axle. Make handles and put axle bolt through at the end and fasten other end to plow. Let seeder run back of plow. The whole affair costs less than 25 cents. It will drop all small seeds—cane, milo, Kaffir corn, broom corn and all the like—and will do as good work as any single row planter except that it will not cover the seed. The next round, however, will cover it with the plow.—Farm and Fireside.



A generous farmer wants others to have the benefit of his experience and is always anxious to assist his neighbor in every way possible. We need more generous farmers and fewer selfish men who care nothing for society further than to get its protection for themselves.

Time to Spread Gypsum.

Gypsum, or "land plaster," ought to be spread on meadows early in the season, when there is plenty of moisture present, as it requires fully 400 pounds of water to make available 100 pounds of gypsum. It assists materially in releasing the potash and making it available; therefore on lands that are supplied with an abundance of potash which is not very available plaster may be extremely valuable.

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Fifty cents invested in a pair of rubbers may save $5 in doctor bills, with plenty of misery thrown in.

There is no better material of which to build hen or hog house than the clay hollow block. Its use means that the structure will be both dry and warm.

President Taft is to be commended for refusing to pardon W. N. Jones, a rich business man of Portland, Ore., who was recently sentenced to serve four months in prison and pay a fine of $12,000 for the part he had in land frauds in the northwest.

A tablespoonful of spirits of camphor stirred in a gallon of water makes a very good solution with which to spray plants that are afflicted with the green lice. This spray fixes the lice and does not harm the foliage plants to which it is applied.

While other members of the animal kingdom may fail to multiply as nature intended, it is pretty safe to assume that the old frosted eared brindle tabby cat will some warm morning soon lead her bevy of kittens from some well protected and secluded spot. This kitten crop is one that is not reduced by frost, blight or drought.

Kansas legislators are to be commended for a piece of legislation lately passed, at once sensible and merciful, which makes it possible to use the idle convicts in the state penitentiaries in the building of a highway from Leavenworth to Kansas City, Kan. The taxpayers will get a return from the labor of the convicts, and the latter will be the better for the physical exercise and fresh air which they will get.

In contrast to the idea—all too prevalent—that one cannot make money raising stock on less than from 100 to 200 acres may be cited the experience of a Pennsylvania dominie who kept thirty head of stock on fifteen acres, growing all the roughage for them on this area, and who by prudent management was able to pay off a mortgage of $7,200 on the place in the course of seven years. To add to his troubles, the farm was badly run down at the time he bought it. While the account does not state, it is fair to assume that at least half of the stock kept consisted of dairy cows, by the keeping of which the building up of the fertility of the soil was an easy matter.

In all the territory where soft coal is relied upon chiefly as fuel for the kitchen stove it is the very bane of cleanly housewives, smearing their floors, soiling the wall paper, dirtying dishes and blackening wearing apparel. The chief fault with this kind of fuel is that under the conditions which usually prevail a complete combustion of the coal is not secured—that is, the smoke and soot are not consumed, but clog and retard the stove, the pipes and flues. While the trouble cannot be entirely done away, it can be materially improved by replenishing the stove more frequently and breaking the coal up into finer pieces. If at hand it will be found a great help to use either cobs or wood with the soft coal. In some localities it is possible to get coke from which the oils and soot producing elements have been largely removed. This makes a very hot fire and will have to be watched closely and renewed quite frequently.

It is only recently that the full value of rape as a pasture for growing pigs has come to be fully realized, and this only by the most progressive hog raisers. One acre of a good stand of rape will furnish pasture for from fifteen to twenty-five hogs, depending upon its rankness and thriftiness. The plant prefers a moist, cool soil, full of humus, and should be sown in the spring as soon as the danger of frost is over. If broadcasted, from six to eight pounds of seed should be used per acre. If drilled, as is sometimes done, in rows from twenty to thirty inches apart, from three to five pounds will answer. Excellent results are also secured by sowing about five pounds of seed on a part of the land to be devoted to oats and clover, the latter seed being put in after the rape. In this case the rape will germinate and grow slowly until the oats are cut, after which it will grow more rapidly, or the oats, clover and rape patch may be used as a pasture as soon as it gets six o seven inches high, no attempt being made to harvest the grain. Such pasture gives an excellent variety and together with corn and oil meal and such milk or buttermilk as is available makes possible very economical pork production. Rape is sometimes sown with satisfactory results as late as June 15, but it will not do well if the weather is dry during the weeks following.

PLOWING WITH DYNAMITE.

Bang, Bang! Will Resound Over the Farm as Gee-haw Once Did.

In places where irrigating is carried on extensively, says the booklet "Increase the Crop," got out by the Pennsylvania railroad, the ground sometimes becomes so saturated that the water level rises close to the surface. This makes the land practically worthless for vegetation of any kind other than pasturage. If alkali exists in the soil or is deposited by irrigation no crops can be raised when the ground water reaches the level of the plant's roots.

In some parts of the country ridges or dikes are run at regular intervals over all of the higher ground to keep the thin surface soil from being washed away. Considerable time and labor are required to make these dikes as well as to keep them in shape, and they take up ground that should be bearing crops. On land of this kind drainage, irrigation, dikes, late plowing and rotting seed could all be done away with if the subsoil or hardpan were properly broken up.

There is only one practical way to upturn and aerate these lower soils or to shatter hardpan, and that is by blasting.

Subsoil and hardpan can be plowed just as effectively with explosives as

GIANT CORN PRODUCED ON BLASTED GROUND.

[From "Increase the Crop."]

surface soil can be with a plow, and just as cheaply, too, for it is only necessary to do this subsoil plowing once in a number of years.

Blasting subsoil has been practiced for some years by a few progressive farmers in different parts of the country. These men have had wonderful results in the way of increased crops on land already under cultivation and in transforming into excellent growing land that which would have been worthless without dynamite.

It is only lately, however, that the benefits from plowing with dynamite have become generally recognized. The department of agriculture, the various agricultural colleges and men prominently identified with farming in different parts of the country are all now making a careful study of this question in order to determine the strength, quantity and kind of explosives, the most effective way of using them and the depth and spacing of the holes for best results. Farmers everywhere are experimenting on their own account. Many are already claiming that subsoil plowing with explosives will be a common custom in a few years and will represent millions of dollars in increased crops from lands already under cultivation and more millions from land now producing nothing but weeds and considered entirely worthless.

The man who provides himself with everything new and useful for carrying on the farm work and leaves the household with implements that date back to pioneer days is not deserving of larger success.

About Live Stock.

Stuffing the colt with hay or straw or any coarse feed will spoil its looks. Keep this ration down by the use of some grain and less coarse feed.

Steers fed on clover hay will not only consume more roughage, but also more grain, than those fed on timothy hay if both grain and roughage are fed according to appetite.

It is the farmer who keeps sheep for a number of years that finds them most profitable. Some years they will return a much better profit than others, and it is hard to sell and buy at just the right time.

The ration of the driving horse should be different from that of the average work horse. This is due in a large measure to the peculiar demands of such an animal. It should be fed much less roughage in proportion to its size than a horse at ordinary work. The roughage should also be of different nature.

The ram should not run with the ewes during the winter. He will worry them, and one bunt might kill a lamb. He should have a box stall, not large, with a good, strong yard attached, where he can be out of doors on all fine days. Never leave him out in a storm so that his fleece will become wet, as it might mean death. Feed him regularly and enough to keep him in good, thrifty condition.

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NEW FACTS; OLD MANURES.

Values of the Various Sorts of Fertilizer Set Forth Briefly.

Horse manure from city stables usually contains 70 to 75 per cent of water in the form in which such manure reaches the farmer. The solid portion of such manure contains of nitrogen from 0.5 to 0.8 per cent, phosphoric acid 0.3 to 0.5 per cent, potash 0.5 to 0.7 per cent, lime 0.5 to 0.8 per cent, with traces of magnesia. The drier the manure the larger the quantity of actual plant food elements in the ton. Computing the above named quantities of nitrogen therein as worth 20 cents per pound, phosphoric acid and potash each 4 cents a pound, the valuation of horse manure of the above range of composition works out from $2.64 to $4.16 per ton.

Sheep manure from stockyards and slaughter houses is sometimes sold in the market either under its own name or as so called "natural guano." Analysis of three such samples sold in Connecticut showed them to contain about as much nitrogen, phosphoric acid and potash as could be bought in the form of fertilizer chemicals for $11 or $12. The sheep manure sold at from $25 to $33 a ton. But, as the station report says, it must also be remembered that 60 per cent of sheep manure consists of fine vegetable matter, which forms humus in the soil and has distinct value in feeding the soil bacteria and in regulating the water content of the soil.

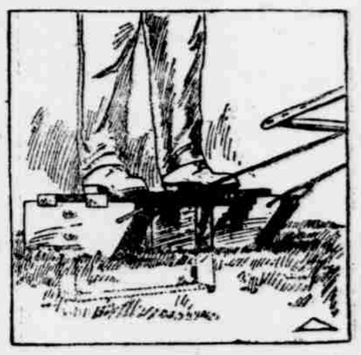
A curious fertilizing material comes in small quantities from silk mills. It is called "cocoon dust" and consists of the dead bodies of silkworms. The Connecticut station found it to be extraordinarily rich in nitrogen, containing nearly 10 per cent of this substance; also small quantities of phosphoric acid and potash.

Sewage waste may be profitable as a fertilizer. The sludge which accumulates on the sand beds used for the purification of sewage at Rockville was found by the Connecticut station to contain of water 68 per cent, of nitrogen 1.34 per cent, with traces of phosphoric acid and potash. This material has almost three times as much nitrogen as stable manure, but it is probably much less available to crops because the more soluble and valuable part of the nitrogen has been removed by water and microbe action. Nevertheless if it can be got for the hauling it might pay for a short haul to plow under.—American Agriculturist.

DON'T CUT SOD WITH SPADE.

Make For Yourself This Ingenious Little Sledge and Halve Your Labor.

The construction of the sod cutter is clearly shown in the sketch. It may be well to add, says Farm Progress, that the knife blade dips downward about three-eighths of an inch in its



CHEAP AND HANDY SOD CUTTER.

width of two and one-half inches. The knife can be adjusted to cut the sod at the proper thickness.

Two men and a boy, with a team, recently cut enough sod to load a slat wagon holding one and one-quarter cubic yards, rolled the sod and loaded the wagon in a trifle more than an hour. The cutter is easily and cheaply made and is a great improvement over the spade.

Puckerless Persimmons.

Yes, it has been done. Do not laugh, you who have been handed persimmons and have bitten to the delight of uproarious spectators.

Our department of agriculture has earned additional fame by taking the pucker out.

We owe the discovery to the Japanese. For five years an expert has been at work for the government devising means to remove the pucker from the persimmon. Like all things, it is simple when you know how. The fruit is put into tanks into which carbon dioxide has been forced and left there three days. Taken out it is sweeter than a Bartlett pear and will keep three times as long.

What part will you take in the campaign for better farming? Much will be required at your hands. Have you determined to do your part?

A Modern Solomon.

"Do you think I am really your affinity?" asked Solomon's nine hundred and eighty-fifth wife coquettishly.

"My dear," said the wisest guy, "you are one in a thousand."

He got away with it too.—Toledo Blade.